

# **METHOD AND APPARATUS FOR COMPUTING A PATH THROUGH A BIDIRECTIONAL LINE SWITCHED RING**

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## **ABSTRACT**

Methods and apparatus for automatically creating a path through a bi-directional line switched ring which uses common time slots are disclosed. According to one aspect of the present invention, an apparatus for creating a path between first and second nodes  
10 through a third node using first and second links includes a querying device, a comparator, and a routing device. The querying device identifies a first time slot of the first link for transferring data from the first node to the third node, and also identifies a second time slot associated with the second link for transferring data between the third node and the second node. The comparator determines when the first time slot and the  
15 second time slot are consistent, and the routing device computes the path between the first and second nodes using the first and second time slots when the first and second time slots are consistent.